



**SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Wichmann, Gunter                      Attorney Docket: 2827/101  
Serial No: 10/664,047                      Art Group Unit: 2821  
Date Filed: September 16, 2003                      Examiner Name: N/A  
Invention: Non-Intrusive Inspection Impulse Radar Antenna

**LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE STATEMENT**

| U.S. PATENT DOCUMENTS |                  |                 |              |                |                |
|-----------------------|------------------|-----------------|--------------|----------------|----------------|
| Examiner Initials     | Reference Number | Document Number | Issue Date   | Inventor       | Class/Subclass |
| JS                    | AA               | US 5,523,760    | June 4, 1996 | McEwan         | 342/89         |
| JS                    | AB               | US 6,445,334    | Sep. 3, 2002 | Bradley et al. | 342/22         |

| FOREIGN PATENT DOCUMENTS |                  |              |                 |                  |                       |                |
|--------------------------|------------------|--------------|-----------------|------------------|-----------------------|----------------|
| Examiner Initials        | Reference Number | Country Code | Document Number | Publication Date | Patentee or Applicant | Class/Subclass |
| JS                       | AC               | DE           | 33 16 937       | April 25, 1996   | Wichmann, G.          | —              |
| JS                       | AD               | DE           | 42 34 559       | March 5, 1994    | Wichmann, G.          | —              |

| OTHER DOCUMENTS   |          |                |   |
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| Examiner Initials | Ref. No. | Author         | Title of Article, Title of Journal, Volume Number, Page Numbers, Date   |
| JS                | AE       | —              | Tektronix, "Sampling Oscilloscope Techniques", October, 1989.   |
| JS                | AF       | Whitely et al. | "50 GHz Sampler Hybrid Utilizing A Small Shockline and An Internal SRD" <i>IEEE MTT-S Digest</i> , pp. 895-898, Copyright 1991.   |
| JS                | AG       | Wichmann, G.   | "Research and Development on the Field of Mine Detection", European Research Office of the U.S. Army, October, 1996.  |
| JS                | AH       | —              | Æther Wire & Location, Inc. , "The Origins of Ultra-Wideband Technology", May, 1998.  |
| JS                | AI       | Tantum et al.  | "ATR Algorithm Performance for the BRTC Wichmann Ground Penetrating Radar System", Department of Electrical and Computer Engineering, Duke University, UXO Forum '99 Proceedings. |
| JS                | AJ       | Daniels, D.    | "An Overview of RF Sensors for Mine Detection: Part 3 Radar", ERA Technology Ltd., 1999.  |

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| ✓ | AK | Andrews et al. | "Research On Ground-Penetrating Radar for Detection of Mines and Unexploded Ordnance: Current Status and Research Strategy", Institute for Defense Analyses, December, 1999.  |
| ✓ | AL | —              | Celia Home Page, Case Study- Resistive Vee Dipole Mine Detection,   |
| ✓ | AM | Montoya et al. | "Land Mine Detection Using a Ground-Penetrating Radar Based on Resistively Loaded Vee Dipoles", , IEEE Transactions on Antennas and Propagation, Vol. 47, No. 12, December 1999.  |
| ✓ | AN | Schukin et al. | "Evolution of GPR Antennas, Pulse Generators and Sample Recorders",<br><a href="http://www.irctr.tudelft.nl/gpr/PDF/Publications/2000/gpr2000_p3_2.PDF">www.irctr.tudelft.nl/gpr/PDF/Publications/2000/gpr2000_p3_2.PDF</a> |
| ✓ | AO | Sachs et al.   | "Ultra-Wideband Principles for Surface Penetrating Radar", <i>Ultra-Wideband, Short-pulse Electromagnetics 5</i> , 31. May- 2. June 2000.   |
| ✓ | AP | Fontana et al. | "An Ultra Wideband Radar for Micro Air Vehicle Applications", IEEE Conference on Ultra Wideband Systems and Technologies, May 2002.   |
| ✓ | AQ | Noon et al.    | "Subsurface Remote Sensing" in "The Review of Radio Science", 1999-2002, IEEE Press (2002).   |
| ✓ | AR | —              | "Subsurface Sensing Lab: Single Chip Sequential Sampling Receiver", University of Houston, December 9, 2002.  |
| ✓ | AS | —              | "Subsurface Sensing Lab", University of Houston, March 11, 2003.  |
| ✓ | AT | —              | "Low-Power, Miniature, Distributed Position Location and Communication Devices Using Ultra-Wideband, Nonsinusoidal Communication Technology", Æther Wire Location, Inc., 2003.  |

Examiner Signature: \_\_\_\_\_

*D. Phil.*

Date Considered: \_\_\_\_\_

*9-2-2005*

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation *if not* in conformance and not considered. Include copy of this form with next communication to applicant.